LISTING OF CLAIMS:

Please amend the claims as follows:

1.   (Currently Amended)   A focusing device with a refractive index profile changing from the center of the focusing device towards its perimeter, comprising:

    a substrate;

    a buffer layer and a core layer disposed on the substrate, wherein a lateral refractive index distribution of the focusing device material is homogeneous; and ~~that the focusing device comprises~~

    a plurality of holes formed in the layers such that the holes are substantially perpendicular to the substrate and the holes introduce [[for introducing]] a graded refractive index profile.

2.   (Previously Presented)   The focusing device according to claim 1, wherein the density of holes increases towards the periphery of the focusing device.

3.   (Previously Presented)   The focusing device according to claim 1, wherein the holes are distributed at random.

4.   (Previously Presented)   The focusing device according to claim 1, wherein the holes are distributed according to a Monte Carlo algorithm.

5.   (Cancelled)

6.   (Previously Presented)   A device comprising a focusing device according to claim 1.

7. – 10. (Cancelled)

Please add the following new claims:

11. (New)   The focusing device according to claim 1, wherein the holes are arranged substantially perpendicular to an incident beam of light which enters the focusing device.

12. (New)   The focusing device according to claim 1, further comprising a clad layer disposed on the core layer.

13. (New)   The focusing device according to claim 1, wherein the focusing device is a lens.

14. (New)   The focusing device according to claim 13, wherein the lens is configured to be disposed adjacent a fiber.

15. (New) A focusing device comprising:
       a substrate;
       a layer stack disposed on the substrate, the layer stack comprising a buffer layer and a core layer; and
       a plurality of holes formed in the layer stack, wherein the holes are arranged substantially perpendicular to an incident beam of light which enters the focusing device and the holes are configured to introduce a graded refractive index profile.

16. (New)   The focusing device according to claim 15, wherein the layer stack further comprises a clad layer disposed on the core layer.

17. (New)   The focusing device according to claim 15, wherein the holes are substantially perpendicular to the substrate.

18.   (New)   The focusing device according to claim 15, wherein the holes are square shaped.

19.   (New)   The focusing device according to claim 15, wherein the substrate has a circular shape.

20.   (New)   The focusing device according to claim 15, wherein the focusing device is a lens.

21.   (New)   The focusing device according to claim 15, wherein the density of holes increases towards the periphery of the focusing device.

22.   (New)   The focusing device according to claim 15, wherein the holes are distributed at random.

23.   (New)   The focusing device according to claim 15, wherein the holes are distributed according to a Monte Carlo algorithm.

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